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:			7.			Oligonucleotide #3
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Insourani M	sseudo	ive; i	unwa	Stin	lammatory	cytostatic;
W neuroprof	pective erribit	e, ant	DATE	robic	vaccine,	mylase, ca cadherin
w cyclin; I	oolyme:	rase;	onco	gene	colony	imulating fac
omple iterl	ıt related kin; G-pro	ated p prote	ed protei rotein co	in; ouple	stein; cytochrome; kinesin; cytokin coupled receptor; thioesterase; i	<pre>ine; interferon; inflammation;</pre>
W multitaci	system	disea	se;	auto. ss.	mmune disease; intection;	
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ollici sap	ens.					

28-DEC-2600; 2000WO-US35498

WO200147944-A2.

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The present invention relates to dilgenuclearides encoding polymarphic of variants of provins related for amylases, amyloid proteins, anglopoletin, achievists for branches proteins, polymers, anglopoletin, applicates proteins, anglopoletin, polymers, interferons, interferons, bistones, kinases, colony stimulating factors, complement related of proteins, cytochromes, kinesins, cytokines, interferons, interleukins, comportein coupled receptors and thiosesterases. The present sequence is one such oligomorphecide. The oligomorphecides and the peptides encoded by them may be used in the prevention, diagnosis and treatment of the proteins listed above. Disorders that may be provented, diagnosis and treatment of above bisorders that may be provented, diagnosed and an inflatence of a rheimmanial antitities, multiple solerasis, disheres, systemic liquis entitities, and favores is, disheres, systemic liquis entitities, and favores is dishered, systemic liquis entitities, and favores is dishered, systemically insenses of the prevous system and an infection of pathogonic contains.
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                                                                                                                                                                        Polymorphic mucleic acids encoding a g amylasor, hyplins, polymorphor, oncogenes and histones, useful for diagnosing and treating, o g cancer, autoimmune diseases and infections -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR; selection; primers; OPTIPPIM; breeding; cattle; parentage; genetic mapping; traits; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match Cost Source for DP 22, Longth for Best Local Similarity 100.0%, Pred. No. 0.03, Matches 50, Conservative C, Mismatches C, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 50 RF, 19 A, 10 C, 7 G, 14 T, 0 other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Microsatellite sequence from clone AGLA285.
                                                                                                                                                                                                                                            Claim 1; Page 2484; 4143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ33591 standard; DNA; 49 BP
              28-DEC-1999; 99US-0173419.
27-DEC 2000; 2000US-0173419
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                                                                                                   Shimkets RA, Leach M;
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                                                                  (CUPA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1992-284684/34.
                                                                                                                                         WFI, 2001-465210/50.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15 JAN 1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-AUG-1992.
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AAQ33591/c
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                                                                                                                                                   The sequence is that of a bovine microsatellite sequence obtd. by screening a library of bovine Mbol DNA fragments of between 250 and 500 by with an (ACl15 and a (TC)15 oligonucleoride probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6)n >9 microsatellites in the bovine genome is estimated at >100, 000. The sequence information for ca. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               other components, comprises passing the solution through a support comprising a covalently coupled oligonucleotide able to form a triple helix with the dsDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amplification of the corresp, microsatellite (using the program objectively). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important
Polymorphic bovine DNA markers - used in genetic identification,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; DNA purification; triple helix; plasmid purification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crouzet J, Scherman D, Wils P, Blanche F, Cameron B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      traits esp. in cattle, to allow selective breeding.
See also AAQ33501-34437.
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/note= "GA repeat type"
                           gene mapping, and selective breeding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                      Table 7; Page 165; 517pp; English.
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This invention comprises a method of purifying double-stranded DNA from a solution containing the double-stranded DNA mixed with other components, comprising passing the solution through a support comprising componently coupled oligonucleotide capable of forming a triple helix with the double-stranded DNA by hybridisation with a specific sequence present in the double-stranded DNA. The method is useful for purifying double-stranded DNA contained in a solution and mixed with other components. The new method is a simple, rapid and effective method for DNA purification, and makes it possible to obtain especially high compiles within the like. The method enables DNA to be purified from complex mixtures comprising other nucleic acids, proteins, endotoxins, nucleases and the like. The supports may be readily recycled, and the DNAs obtained display improved properties to pharmaceutical safety. Further, the method entails only one step contrary to prior at.

The present sequence represents a DNA sequence contained within the plasmid pxi2726. This sequence is used for purification of this
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                                                         Example 7; Page 20; 40pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JAN-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ33615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
\mathbf{x} \otimes \mathbf{x} \otimes \mathbf{y} \otimes
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One out of $0 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6) n >9 microsatellites in the bovine genome is estimated at >100, non The sequence information for ca. 270 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequence upstream and downstream of the microsatellite sequence.
                  The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCP primers for in vitro amplification of the corresp. microsatellite (using the program POPITPRIM). The microsatellites may be used to identify individuals, for parentage resting, and in the generic mapping of economic trait loci, or genes involved the determinism of economically important
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        were used to generate the required pre-primers for in vitro amplification of the cerresp microsatellite (using the program oPTPRIM). The microsatellites may be used to identify individuals, for parent age testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important
is summarised in the specification and indexed herein (see below).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is that of a hovine microsatellite sequence obt-d by screening a library of hovine Mhoi DNA fragments of between 24n and 50n by with a No.115 and a (TC)15 oilgonicleotide probe one out of 50 clones cross-hybridised. Assuming independent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              used in generic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCP, solection, primors, OPTIFFIM, treeding, cartle, farentage, genetic mapping, traits, amplification, ss.
                                                                                                                                                                                                                                      0 F%; Score 34.2; DB 13; Length 49; (3.0%; Pred No. 1 Ae+02;
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                        47 icin'in'in'in'in'in'in'in'indrandrandrandrandrandran 1
                                                                                                                                  traits esp in cartle, to allow selective breeding.
See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to allow selective breeding.
                                                                                                                                                                                                 Sequence 48 BP; 24 A; 0 C; 24 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                             C, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Microsofellite sequence from this AGLA267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Table 7; Page 160; 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polymorphic bevine DMA markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ33577 standard; DNA; 44 BP.
                                                                                                                                                                                                                                                         Best Local Similarity 83.0%;
Matches 39, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91US 0642342.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            traits esp in cattle, to
See also AAO33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Georges M. Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GENM ) GENMARK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 JAN 1992,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 JAN 1991,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ33577;
                                                                                                                                                                                                                                        Query March
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ33577/c
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
                                                                                                                                                                                                                                                                                                                                                        C,D
  5828855558%
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The sequence is that of a bovine microsatellite sequence obtd, by screening a genomic library of bovine Mtol DNA fragments of between 25 and show by with an (ACINS and a TC)15 oligonomic active probe.

25 and show by with an (ACINS and a TC)15 oligonomic active probe.

26 One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of Gibbs of Microsatellites and Mbol sites, the frequency of COO. The sequence information in the bovine genome is estimated at along is summarised in the specification and indexed herein (see below).

27 The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCP primers for in vitro amplification of the corresp. microsatellite (using the program of the corresp. microsatellite (using the program of the parential microsatellite (using the program of the parential mapping of economic trait traits esp. in cattle, to allow selective breeding.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                     PCR, selection, primers, OFTIFRIM, breeding, cattle, parentage, genetic mapping, traits, amplification, ss.
                                            Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.6%; Score 32.6; DB 13; Length 49; 90.9%; Prod; No. 4.40+07; 174E 0: Mismatches 9; Indels 7
            Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Indels
        0.6%; Score 33.4; DB 13;
86.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 6;
                                                                           Sequence 49 BF, 24 A, 2 C, 23 G, 0 U, 0 other,
                                                                                                                                                                                                                                                                                                   Sequence of microsatellite from clone AGLA218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Table 7, Page 136, 517pp, English.
                                                                                                                                                                                               AAC33523 standard, DNA, 49 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31US 0642342.
                                                                                                                                                                                                                                                                   02-FEB-1993 (first entry)
Ouery Match
Bost Local Similarity 86.0%
Marches 37, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
es 38, Conseiv.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GENM-) GENMARK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JAN: 1992,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JAN: 1991,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-AUG-1992.
                                                                                                                                                                                                                                                                                                                                                                                         Bos taurus.
                                                                                                                                                                                                                                   AAQ33523;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                 AAQ33523/c
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                                                                                                                                                                 RESULT 6
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The invention relates to a substantially purified or isolated nucleic acid (I) from ryegrass or fescue species including a simple sequence repeat (SSR), having 2 or more tandemly respeated nucleotide core elements 2-6 nucleotides in length. Also included are a nucleic acid primer 2-6 nucleotides in length. Also included are a nucleic acid primer 2-6 nucleotides or fescue genomic DNA enriched for SSRs by preparing a library of ryegrass or fescue genomic DNA enriched for SSRs prepared by the MI, selecting for fescue genomic DNA enriched for SSRs prepared by the MI, selecting for a gene in grass or cereal breeding by identifying an SSR that is closely a ssociated with the gene such that the SSR and the gene are preferentially co-inherited, and selecting for the SSR in the breeding, a method for DNA profiling grass or cereal species varieties by assessing variation between SSR variation and testing the purity of grass or cereal seed batches by assessing variation within seed batch of an SSR The SSPS may be used in the selection of genes in grass or cereal cereal seed batches will for profiling grass or cereal seed batches by assessing variation within seed batch of an SSR The SSPS may be used in the selection of genes in grass or cereal cereal seed batches, and for DNA profiling to establish the distinct identity, uniformity and/or stability of a cultivar. The present sequence is a ryegrass or fescue SSR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·
0
                                                                                                                                                                                    Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat; cereal profiling; grass profiling; seed batch purity testing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New simple sequence repeats having 2 or more tandemly repeated nucleotide core elements isolated from ryegrass and fescue, useful for selecting of genes in grass or cereal breeding or profiling grass or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.6%; Score 32.2; DB 23; Length 38; 31.9%; Pred, No. 4.7e+02; ve 0; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE VICTORIA DEPT NATURAL PES & ENVIRO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 38 BP; 0 A; 19 C; 0 G; 19 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 rerererererererererererererererer 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INT MAIZE & WHEAT IMPROVEMENT CENT.
                                                                                                                                             Simple sequence repeat, SSR, #23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 6; Page 51; 72pp; English.
                       AAS13726 standard; DNA; 38 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UNIV SOUTHERN CROSS.
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                                                                                                                                                                                                                                                                                                                                                                   03-JAN-2001; 2001NZ-0509193.
                                                                                                                                                                                                                                                                                                                                                                                                            99AU-0004906
                                                                                                                                                                                                                                                                                                                                                                                                                             04-MAY-2000; 2000AU-0007310
                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cereal species varieties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jones ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UNIV ADELAIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-512563/56.
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                                                                                                                                                                                                                                                                                                                                                                                                          24-DEC-1999;
                                                                                                     08-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Forster JW,
                                                                                                                                                                                                                                                                                                                           25-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34;
                                                                                                                                                                                                                                                                                     MZ509193-A.
                                                             AAS13726;
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                                                                                                                                                                                                                                               Poeae.
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AAS13726
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The present invention relates to a method for the synthesis of a first nucleotide which involves coupling a second nucleoside to a first nucleoside through a phosphite linkage, where the second nucleoside has a non-carbonate protecting group protecting a hydroxyl, and exposing the product to a composition which concurrently oxidizes the phosphite formed to a phosphate and deprotects the protected hydroxyl of the second nucleoside. The method is useful for synthesizing the polynucleotides, for carrying out either 3 to 5' or 5' to 3' synthesis and for fabricating an addressable array of polynucleotides on a substrate. The present sequence is an oligonucleotide produced to demonstrate the method
                                                                                                                                                                                                                                                                                                                                                                                                                               Synthesis of polynucleotide useful during fabrication of an array involves coupling nucleoside phosphoramidite and a solid-supported nucleoside and treating the product with an oxidation/deprotection
                                                                                                                           Oligonucleotide synthesis; polynucleotide array; protecting group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                  Caruthers M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.6%; Score 32.2; DB 24;
31.9%; Pred. No. 4.7e+02;
ve 0; Mismatches 3;
                                                                                          Oligonucleotide synthesis method related DNA #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1064 TITCICICICTCTCTCTCTCTCTCTCTCTCTCTCT 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 38 BP; 0 A; 19 C; 0 G; 19 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Microsatellite sequence from clone AGLA230.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genetic mapping; traits; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                 Betley JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 15; 36pp; English.
                                                                                                                                                                                                                                                                                                                                    (AGIL-) AGILENT TECHNOLOGIES INC
AAL45123 standard; DNA; 38 BP
                                                                                                                                                                                                                                                                                                                                                                  Perbost MGM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91.98;
                                                                                                                                                                                                                                                                                                   28-JUL-2000; 2030US-0627249.
                                                                                                                                                                                                                                                                      27-JUL-2001; 2001EP-0118369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ33540 standard; DNA; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                             24-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 91.9 es 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-156732/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the invention.
                                                                                                                                              oxidation; ss.
                                                                                                                                                                                                                                                                                                                                                                  Dellinger DJ,
                                                                                                                                                                                                        EP1176151-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-FEB-1993
                                                                                                                                                                                                                                       30-JAN-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bos taurus,
                                                                                                                                                                          Synthetic.
                               AAL45123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ33540;
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Gaps

RESULT 8 AAL45123

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The sequence is that of a bovine microsatellite sequence obtd, by screening a library of bovine Mbol DNA fragments of between 250 and 500 bp with an (AC)15 and a (TC)15 alignment-e-tide probe. One out of 50 clones cross-bybridsed. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6)n >9 microsatellites and Mbol sites, the frequency of 000. The sequence information for 2a. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPTIPPIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important traits esp. in cattle, to allow selective breeding.

See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, rosoquonce, genciype, disease, furensiu, paternity testing;
                                                                   Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amplification of the corresp. microsatellite (using the program
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%; Score 31.8; DB 13; Length 36; 94.3%; Pred. No. 5.80+02; tive 6; Mismatches 7; indels 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homan single numlettide grilyminghism (200) DPYSL2 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 36 BP, 18 A, 0 C, 18 G, 0 U, 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ratarataratararararararararar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single nucleotide polymorphism; SNP; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                  gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers replace(16,A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cargill M, Ireland JS, Lander ES;
                                                                                                                                                              Table 7; Page 168; 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA129604 standard, DNA, 31 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAP-2001; 2001W2-11507268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07:MAR-2000; 2000US-0187510.
22-MAY-2000; 2000US-0206129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18.CCT.2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 94.3 es 33, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-522952/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200166800-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 SEF-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAI29604,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
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A NO SECUL OF THE SECOND SECUL OF THE SECOND SECOND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  screening a library of bovine Mbol DNA fragments of between 250 and and be with an (AC)15 and a frols oligonacteotide probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (TG) > 9 microsatellites in the bovine genome is estimated at >100, non The sequence information for as 230 such bovine microsatellites in the specification and indexed herein (see below).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCP primers for in vitro amplification of the corresp microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait. Itself, or genes involved the determinism of economically important sea uso AQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Side
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is that of a bovine microsatelline sequence obtd by
                                                                                                                                                                                                                                                                                                                                                                                                                            Polymorphic hovine DNA markers - used in genetic identification, gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c`
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.6%; Score 31.8; DB.13; Length 36;
4.3%; Pred. No. 5.96+02;
ve. 0; Micmatches 7; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 36 BP; 18 A; 0 C; 18 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1006 ಗಂಗಂಗಾರಗಳಂಗಗನಗಳುಗಳುಗಳುಗಳುಗಳುಗಳುಗಳುಗಳು
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Microsatellite sequence from clone AGLA291.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table 7, Page 144, S17pp, English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ33597 standard, DNA, 36 BP.
                                                                                           92WO-US00340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 94.3%,
                                                                                                                                                           91US-0642342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92WO-US00340.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               いっちゅうかいき しりゅ
                                                                                                                                                                                                                                                                                             Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                                                                                WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GENM-) GENMARK.
                                                                                                                                                                                                                          (GENM-) GENMARK
                                                                                        15-JAN-1992;
                                                                                                                                                           15-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-1991;
                            06-AUG-1992.
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                                                                                                                                                                                                                                                                                             Georges M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Trypsin; inhibitor; human T98G cells; pancreatitis; shock; DIC; multiple organ failure; disseminated intravascular coagulation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A polypeptide having trypsin inhibitory activity, mcl.wt. 22-28 kD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide having trypsin inhibitory activity - for the treatment of pancreatitis, shock, multi-organ failure, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 0.6%; Score 30.8; DP 15; Length 48; Local Similarity 83.3%; Pred. No. 1.2e+03; nes 35; Conservative 0; Mismatches 7; Indels 0
                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Trypsin inhibitory protein cDNA antisense primer-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%, Score 31; DB 22, L
100.0%; Pred. No. 8.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 48 BP; 2 A; 1 C; 1 G; 44 T; 0 other;
                                                                                                          Sequence 31 BP; 6 A; 9 C; 9 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                            2317 GGTCACGGGCAGTGCCCATTGCACGTTTAAC 2347
                                                                                                                                                                                                                                                                                                         1 GGTCACGGGCAGTGCCCATTGCACGTTTAAC 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 7; Page 15; 25pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV41447 standard; cDNA; 49 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT04081 standard; DNA; 48 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-MAY-1996 (first entry)
                                                                                                                                                                                                                        31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-355285/46.
                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-SEP-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT04081;
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                                                                                                                                                                    Query Match
                                                            testing
                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV41447/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT04081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME OF COLOR OF STREET OF
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                                                                                                                                 (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genese from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes)
                                                                                                             The invention relates to the identification of nucleic acid molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, resequence, genotype, disease, forensic, paternity testing, single nucleotide polymorphism; SNP; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human single nucleotide polymorphism (SNP) DPYSL2 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                       .Match 0.6%; Score 31; DB 22; L
Local Similarity 100.0%; Pred. No. 8.3e+02;
es 31; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 31 BP; 5 A; 10 C; 9 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1673 GGGACAAGCCTGCTGCCTTTGACCAGT 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGGACAAGCCTGCTCGCTGCCTTTGACCAGT 31
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associated with a particular genotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cargill M, Ireland JS, Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 34; 145pp; English.
                                                      Claim 1; Page 34; 145pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          replace (16,G)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-MAR-2001; 2001WO-US37268.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2000; 2000US-0187510.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-2000; 2000US-0206129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAI29605 standard; DNA; 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-522952/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200166800 A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA129605;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                     testing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA129605
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Gaps

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22-MAR-2001
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                                                                                                                                                                                                             Merberg D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus.
                                                                                                                                                                                             Jacobs K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ33565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ33565/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This is the nucleotide sequence of the clone RN176 1, used in the method of the invention involving secreted proteins from human cells potentially useful as immuno-modulacors, anti-tumour agents, tissue growth promoters, heamostatic and thrombolytic agents. It was isolated from a foetal human kidney cDNA library. They may be used to express the recombinant protein, as tissue/molecular weight markers, for chromosome identification, to identify possible genetic disorders and isolate new related DNA, as sources of primers for PCR, to generate anti-protein or anti-DNA antibodies, or in interaction trap assays to
                                                                         Close PRIVE 1; segreted protein; human cell, immuno medulator, prp, anti-tumour agent; tissue growth promoter; haemostatic agent; primer; thrombolytic agent; molecular weight marker; genetic disorder; antibody; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, secreted protein, nutrient, cytokine modulator, proliferation, differentiation, immune system modulator, tissue growth, chemotaetic, haemostatic, thrombolytic, anti-inflammatory, tumour inhibition, ss,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                potentially useful, e.g. as immuno-modulators, anti tumour agents, promoters of tissue growth, haemostatic and thrombolytic agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid encoding secreted protein from human cells
                                                                                                                                                                                                                                                                                                                                                                                                                                       Merberg D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 6%; Score 30.4; DB 19; Length 49;
                                   Nucleotide sequence of the 3' portion of the RD176_3 clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 identify sequences that encode interacting proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3117 TICTITCTICCTICCTTITITITITITITITITITITAA 3157
                                                                                                                                                                                                                                                                                                                                                                                                                                     Lavallie EP, McChy JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human cDNA clone BD176_3 3' sequence SEQ ID 74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 49 BP; 44 A; 0 C; 1 G, 3 T, 1 other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treacy M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 24; Page 71; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF98419 standard; cDNA; 49 RP
                                                                                                                                                                                                                                                                                                                                          96US-0749745.
                                                                                                                                                                                                                                                                                    97WO-11520740
                                                                                                                                                                                                                                                                                                                        97US-0969515.
                                                                                                                                                                                                                                                                                                                                                              97US-0867678.
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12-0CT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                               OBMY ) GENETICS INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     I, Jacobs K,
Spaulding V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-297936/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                           WO9821332-A2
                                                                                                                                                                                                                                                                                                                    13-NOV-1997;
                                                                                                                                                                                                                                                                                  14-NOV-1997;
                                                                                                                                                                                                                                                                                                                                          15-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                              02-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Agostino MJ,
                                                                                                                                                                                                                                             22-MAY-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF98419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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Matches

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RESULT 15

Homo sapiens

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tumour inhibition activity. Included in the invention are probes represented in AAF98490 - AAF98572 which are specific for the cDNA clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cDM clones represented in AAF98374 - AAF98489 encode secreted proteins AAB90667 - AAB9076.0 The cDNA clones are isolated from various tissue types, and may be used in the prevention, treatment and diaquosis of diseases associated with inappropriate protein expression. The polypeptides and nucleic acids may be used as nutrients or to modulate cytokine and cell proliferation/differentiation activity and may also be involved in modulation of the immune system. The cDNA sequences, proteins, their agonists and/or antagonists exhibit inapprofesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        regulating activity; tissue growth activity, activin/inhibin activity, chemotactic/chemokinetic activity, hasmostatic and thrombolytic activity, receptor/ligand activity, anti-inflammatory activity, hasmatoposesis activity, anti-inflammatory activity, hasmatoposesis activity, canderin/tumour suppressor activity, and/or tumour inhibition activity Included in the invention are probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolated nucleic acids encoling polypeptides, useful for modulating e.g. cytokine and cell proliferation/differentiation activity, the immune system and hematopolesis regulating activity -
                                                                                                                                                                                                                                                                                                 Erans C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FCR; selection, primers, OPTIFRIM, breeding, cattle, parentage; genetic mapping; traits; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ċ.
                                                                                                                                                                                                                                                                                           Collins-Pacie LA, Evans (
Spaulding V, Agostino MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 0.6%; Score 30.4; DB 22; Length 49; Local Similarity 82.9%; Pred. No. 1.5e+03; nes 34; Conservative 0; Mismatches 7; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3117 TICTITCTICCTICCTTTTTTTTTTTTTTTTTAA 3157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 TITITICITIATITITITITITITITITITITITITAA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 49 BP; 44 A; 0 C; 1 G; 3 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Microsatellite sequence from clone AGLA257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Page 429; 557pp; English.
                                                                                                                                                                                                                                                                                        LaVallie EP,
                                                                                                                                                                                                                                                                                                                       Bowman MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding the secreted proteins.
                                                                                                                14-SEE-IJOO, LOOUWO-US25135.
                                                                                                                                                                          99US-0398829.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92WC-US00340.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ33565 standard; DNA; 33
                                                                                                                                                                                                                                 (GEMY ) GENETICS INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-FEB-1993 (first entry)
                                                                                                                                                                                                                                                                                        MCCOY JM,
Treacy M,
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-244801/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GENM-) GENMARK.
WO200119988-A1.
                                                                                                                                                                          17-SEP-1999;
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Disclosure, Column 13-14; 186pp; English.
                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WC200155320-A2.
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07-JUL-2000, 2
07-JUL-2000, 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUL-2000;
11-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-FEB 2000;
24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                           AAL07488;
                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                              RESULT 18
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  The sequence is that of a bovine microsatellite sequence obtd. by screening a library of bovine Mool DNA fragments of between 250 and 500 bp with an (AC)15 and a (C7)15 oligonucleotide probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6)n >9 microsatellites in the bovine genome is estimated at >100,000. The sequence information for ca. 230 such bovine microsatellites in the specification and indexed herein (see below).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polymorphism; repeat sequence; genetic marker; primer; amplification; PCR; polymerase chain reaction; paternity; maternity; human; pedigree; linkage analysis; genetic disease; animal; plant; breeding; locus; hybridisation; chromosome, ds.
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                            The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro
                                                                                                                                                                                                                   amplification of the corresp. microsatellite (using the program OPTIPPIM). The microsatellites may be used to identify individuals,
                                                                                                                                                                                                                                         for parentage testing, and in the genetic mapping of economic trait
                                                                                                                                                                                                                                                    loci, or genes involved the determinism of economically important traits esp. in cattle, to allow selective breeding.
                                            Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n - using novel nucleic acid mols. as primers
                                                                                                                                                                                                                                                                                                                         0.5%; Score 29.8; DB 13; Length 33; 93.9%; Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Repeat sequence from polymorphic marker clone Mfd122.
                                                                                                                                                                                                                                                                                                                        ; Ub
1.7e+03;
2;
                                                                                                                                                                                                                                                                                                 Sequence 33 BP; 17 A; 0 C; 16 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                   ilarity 93.9%; Pred. No. 1.7e
Conservative 0; Mismatches
                                                        gene mapping, and selective breeding
                                                                             Table 7; Page 155; 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
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94US-0222177
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT65793 standard; DNA; 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MARS-) MARSHFIELD CLINIC
                                                                                                                                                                                                                                                                          See also AAQ33501-34437,
 Georges M, Massey JM,
                      WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-042299/04.
                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-APP-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-APP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US5582979-A.
                                                                                                                                                                                                                                                                                                                                               31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT65793;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Weber JL;
                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT65793/c
                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 17
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The invention relates to the isolation of polymorphic repeat sequences having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic markers. Primers based on these sequences can be used to detect these repeats, especially for use in e.g paternity or maternity testing, human genetic analysis such as linkage analysis of genetic disease, commercial animal or plant breeding or pedigree analysis. Clones containing the repeat sequences were isolated by Hybridisation of probe. Over 100 repeat blocks were isolated. The inserts from the probe. Over 100 repeat blocks were isolated. The inserts from the clones were amplified by primers AAPG5798-T66047. Those clones where the repeat sequence has been determined are shown in AAPG5704-797. This repeat sequence is from the marker clone Mdf122 which contains the repeat sequence having the formula: TTTACAGTAG(CA)17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; reproductive system related antigen; reproductive system disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human reproductive system related antigen DNA SEQ ID NO: 10176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 29.8; DB 18; Length 44; 3.9%; Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 44 BP; 20 A; 2 C; 18 G; 4 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 1.9e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1066 TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44 rérererererererererererererer 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAL07488 standard; DNA; 38 BP
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2000US-0216647.
2000US-0216880.
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2000US-0218290.
2000US-0220963.
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26-JUL-2006; 2000US 0220964.
26-JUL-2006; 2000US 0220964.
14-AUG-2006; 2000US 0224519.
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14-AUG-2000; 2000US-0225214.
14-AUG-2000; 2000US-0225266.
14-AUG-2000; 2000US-0225268.
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16-MAR-2000; 2000US-0189874.
17-MAR-2000; 2000US-0190076.
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07-JUN-2000; 2000US-0209467.
28-JUN-2000; 2000US-0214886.
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2000US-0184664.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-JAN-2000; 2000US-0179065
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31; Conservative
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2000/S 0237038
2000/S 0237039
2000/S 0237040
2000/S 0237040
2000US 0225270
2000US 0225447
2000US 0225757
2000US 0225759
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2000US-0236327,
2000US-0236347
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2000US-0241785.
2000US-0241786.
2000US-0241787.
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2000US 0244417
2000US 0246474.
2000US 0246475.
2000US 0246475.
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200005-0246523.
200005-0246524
200005-0246525.
200005-0246525.
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2000US-0236802.
2000US-0237037.
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0229509
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0236369.
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.0210437
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2000US-0231244
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2000US-0232080
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2000115-0232397
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2000/18-0232399
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2000TS-0240960
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2000118-0241909
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              14-AUG-2000
118-AUG-2000
12-AUG-2000
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22-AUG-2000
23-AUG-2000
23-AUG-2000
23-AUG-2000
21-SEP-2000
01-SEP-2000
                                                                          01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
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The present invention provides the protein and coding sequences of a number of human reproductive system related antigens. These can be used in the prevention and treatment of reproductive system disorders, including cancer. The present sequence is a genemic sequence encoding a protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated nucleic acid molecule encoding a repositive system antigen is used in preventing, treating or ameliorating a medical condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure, SEQ ID NO 10176, 1297pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                c:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ery Math.
St Local Similarity 91.2%, Pred. No. 2.5e+03,
tches 31; Conservative 0, Mismatches 3, Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF; 35 A; 0 C, 3 G, 0 U, 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rosen CA, Barash SC, Ruben SM
                                                                      200075-3246528.
200075-9246533.
200075-9246609.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001U3-0259678
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09 H70V - 2766 | 28 H70
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AAT88080/c
ID AAT880
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AC AAT880
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Matches
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AAT88280 standard, cDNA, 49

AAT88080

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cell proliferation; differentiation; regulation; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ33551,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
 0
                                                                                                                                                                                                                                                                                                                                                                                                               or suppressing, hadmatopolesis regulating, insular primary or suppressing, hadmatopolesis regulating, tissue growth, activities in can also be used to research or treat thrombolytic, receptor/ligand, anti-inflammatory or tumour inhibition activities. It can also be used to research or treat diseases/disorders related to its function.

The partial cDNA clone API62 was 1st isolated from a human adult placenta cDNA library. The partial cDNA clones AM931, AM610, AM340, AM282, AK647, AK583, and AK296 were 1st isolated from a human corrected from a human peripheral blood monocyte cell (Thlore isolated from a human peripheral blood monocyte cell (Thlore isolated from a human overy (PA) teratocarcinoma) cDNA library. The partial cDNA clones AM911, AT205 and AT319 were 1st isolated from a human overy (PA) teratocarcinoma) cDNA library. The partial cDNA clones and and endiritic cell cDNA library. The partial cDNA clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      library. The partial cDNA clone AR260 was 1st isolated from a human adult retina cDNA library. The partial cDNA clones K640 and K39 were 1st isolated from a murine bone marrow (stromal cell line
                                                                                                                                                                                                                                                                                                                                                                                         human secreted protein, which may have nutritional uses, or cytokine and cell proliferation/differentiation, immune stimulating
                                                                                                                                                                                                                                                                                                                                                                            The present sequence is the 3' portion of a cDNA clone encoding a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human secreted protein AK533 3' portion including the polyA tail.
                                                                                                                                                                                                                                                                                                           Human and murine secreted proteins - useful to research or treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; secreted protein; ATCC 98026; cytokine; immunomodulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AS34 and AS32 were 1st isolated from a human foetal brain cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8; Indels
                         3' portion of cDNA clone encoding secreted protein AK533.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PTTTTTTTTTTTTT 3155
                                                    Human; secreted protein; research; treatment; AM533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 18;
                                                                                                                                                                                                                                                                                                                        diseases or disorders related to their function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 29.2; DB 18
Pred. No. 2.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 49 BP; 40 A; 2 C; 6 G; 1 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 86; 140pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV02146 standard; cDNA; 49 BP
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                                                                                                                                                                                                   96US-0631184.
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                                                                                                                                                                        97WO-US06042
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14-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34; Conservative
                                                                                                                                                                                                                           (MURO-) MURO PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FCM-4) cDNA library.
                                                                                                                                                                                                                                                                                 WPI; 1997-526459/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                portion; ds.
                                                                                                                                                                                                                                                       Theoharides TC,
                                                                                                                                                                      11-APR-1997;
                                                                                           Homo sapiens.
                                                                                                                   WO9739122-A2.
                                                                                                                                                                                                  12-APR-1996;
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                                                                                                                                              23-OCT-1997.
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AAV02146/c
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The present sequence encodes a portion of a novel human secreted protein deposited under accession number ATCC 98026. The secreted protein can be used to determine biological activity, to raise antibodies, as tissue markers, to isolate cognate ligands or receptors, to identify agents that modulate their interactions and as nutritional supplements. It may also have a very wide range of biological activities although no evidence for any is provided in the specification. Typical of these are cytokine, cell proliferation/differentiation modulating activity or induction of other cytokines; immunostimulating/immunosuppressant cativities (e.g. for treating human immunofficiency virus infection, cancer, autoimmune diseases and allergy); regulation of haematopoiesis (e.g. for treating anaemia or as adjunct to chemotherapy); stimulation of growth of bone, cartilage, tendons, ligaments and/or nerves (e.g. for treating wounds, periodontal disease, neurological diseases stroke, fibrosis); inhibition or stimulation of follicle stimulating hormone (for control of fertility); chemotactic and chemokinetic activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (e.g. for treating infections, tumours); haemostatic or thrombolytic activity (e.g for treating haemophilia, cardiac infarction etc ); anti-inflammatory activity (e.g. for treating septic shock, Crohn's disease); as antimicrobials; for treating psoriasis or other hyperproliferative disease; for regulation of metabolism, behaviour, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       many others. Also contemplated is the use of the corresponding nucleic acid in gene therapy procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCP, selection; primers, OPTIPPIM; breeding; cattle; parentage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New secreted proteins encoded clones present in ATCC 98026 - possibly having cytokine, cell proliferation/differentiation regulating, immunomodulating and many other activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 29.2; DB 18; Length 49;
81.0%; Pred. No. 2.9e+03;
ative 0; Mismatches 8; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                         Jacobs K, Lavallie ER, McCoy JM, Merberg D, Racie LA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 49 BP; 40 A; 2 C; 6 G; 1 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Microsatellite sequence from clone AGLA243.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                genetic mapping, traits, amplification, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 86; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ33551 standard; DNA; 32 BP.
                                                                                                                                                                                                                    97WO-US06139.
                                                                                                                                                                                                                                                                                          96US-0634325.
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                                                                                                                                                                                                                                                                                                                                                                (GEMY ) GENETICS INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-526460/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Homo sapiens.
                                                                                                                                                                                                                14-APR-1997;
                                                                                                                                                                                                                                                                                      18-APR-1996;
                                                                 WO9739123-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Spaulding V;
                                                                                                                                           23-OCT-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ33551;
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Bos taurus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ33520/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is that of a bovine microsatellite sequence obtd. by screening a library of bovine Mool DNA fragments of between 250 and 500 hp with an (AC)15 and a (C7)15 oligonucleotide probone out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6)n 9 microsatellites in the bovine genome is estimated at >100, 000. The sequence information for ca. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro amplification of the corresp. microsatellite (using the program OPTIPPIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                loci, or genes involved the determinism of economically important traits esp in cartle, to allow selective breeding.
                                                                                                                                                                                                                                                                                                                                                 Polymorphic boxing DWA markers - used in gametic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer, amplification, bracketing, locus, electrophoresis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 28.8; DB 13; Length 32; 93.8%; Pred. No. 2.88+03; Ative 0; Mismatches 2; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 32 RP, 16 A, 0 C, 16 G, 9 U, 0 other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR amplification primer F13A01 fwd 248-Eam-9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32 representation of the second of the secon
                                                                                                                                                                                                                                                                                                                                                                     gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detection; polymorphic region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                 Table 7; Page 149; 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX30238 standard; DNA; 47 BP.
                                                                                                                               92WO-US00340
                                                                                                                                                                      91US-0642342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (OLIG-) OLIGOTRAIL LLC
                                                                                                                                                                                                                                                             Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                      WPI; 1992 284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                 (GENM ) GENMARK
                                                                                                                                                                      15-JAN 1991;
                                                                                                                             15-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09914371-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C
                                           WO9213102-A.
                                                                                    06-AUG-1992.
  Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX30238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX30238/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 22
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region in a genetic locus using bracketing locus compatible or specific calibrating markers. The method can be used to determine DNA fragment lengths of a polymorphic region (P) of a genetic locus, especially containing short tandem repeats. AAX30221 to AAX30248 represent PCR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                             A method has been developed of detecting the length of a polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   screening a genomic library of bovine MboI DNA fragments of between 250 and 500 bp with an (AC)15 and a (TC)15 oligonucleotide probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is that of a bovine microsatellite sequence obtd by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCP, selection, primers, OPTIPPIM, breeding, cattle, parentage, genetic mapping, traits, amplification, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primers used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 0.5%; Score 28.6; DB 20; Length 47; Loral Similarity 79.1%; Pred No 3 9+03; es 34; Conservative 0; Mismatches 9; Indels 0
                                                                                                                                                             Detection of length of polymorphic region in genomic loci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3118 ICITICITCCTTCCTTTTTTTTTTTTTTTTTTTTTAAGAG 3160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45 TCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTGAAGAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 47 PP; 29 A; 2 C; 10 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence of microsatellite from clone AGLA217.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene mapping, and selective breeding
                                                                                                                                                                                                                                                            Example 3; Page 16; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Table 7, Fage 135, 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ33520 standard; DNA; 31 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92WO-11S00340
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-FEB-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1992-284684/34.
                                                                                     WPI; 1999-254401/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENM-) GENMARK.
Dau PC, Liu D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-1991;
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                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequences upstream and downstream of the microsatellite sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     were used to generate the required PCR primers for in vitro amplification of the corresp. microsatellite (using the program OPTIPRIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important traits esp. in cattle, to allow selective breeding.
for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important traits esp. in cattle, to allow selective breeding. See also AAQ33501-3443,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage; genetic mapping; traits; amplification; ss.
                                                                                                                                                                                                                                                     0.5%; Score 28.4; DB 13; Length 31; 96.7%; Pred. No. 3.5e+03; tive 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 46 BP; 18 A; 2 C; 26 G; 0 U; 0 other;
                                                                                                                                                                                  Sequence 31 BP; 21 A; 0 C; 10 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Microsatellite sequence from clone AGLA259.
                                                                                                                                                                                                                                                                                                                                                                                                   1078 TCTCTCTCTCTCTCTCTCTTTTTTT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31 rerererererererererereririri 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Table 7; Page 157; S17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ33571 standard; DNA; 46 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92WO-US00340.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GENM-) GENMARK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JAN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-FEB-1993
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                                                                                                                                                                                                                                                                                                                                29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bos taurus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ33571;
                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ33571/c
                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 24
                                                                                                                                                                                                                                                                                              Best
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The sequence is that of a bovine microsatellite sequence obtd. by screening a genomic library of bovine Mbol DNA fragments of between 250 and 500 bp with an (AC115 and a (TC)15 oligonuclectide probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (T6)n >9 microsatellites in the bovine genome is estimated at >100,000. The sequence information for ca. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amplification of the corresp. microsatellite (using the program OPTIRRIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                           PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage; genetic mapping, traits, amplification, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 28.2; DB 13; Length 45; 30.5%; Pred. No. 4.70+03; lve 0; Mismatches 8; Indels 0
46 CTCTCTCTCTCTCTCTCTCTCCGCTCTCCGGCTCTCCCTCTCTCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          traits esp. in cattle, to allow selective breeding.
See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 45 BP; 30 A; 0 C; 15 G; 0 U; 0 other;
                                                                                                                                                                                                                          Sequence of microsatellite from clone AGLA215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene mapping, and selective breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table 7; Page 134; 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK30170 standard; DNA; 50 BP.
                                                                                                                     AAQ33517 standard; DNA; 45 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                           91US-0642342.
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                                                                                                                                                                                                                                                                                                                                                                                                                        92WO-US00340.
                                                                                                                                                                                         02-FEB-1993 (first entry)
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Matches 33; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Georges M, Massey JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GENM-) GENMAPK
                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                    WO9213102-A.
                                                                                                                                                                                                                                                                                                                                                                                     06-AUG-1992.
                                                                                                                                                                                                                                                                                                                   Bos taurus.
                                                                                                                                                        AAQ33517;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK30170;
                                                                                                     AAQ33517/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK30170
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Match 0.5%; Score 28.4; DB 13; Length 46; Local Similarity 76.1%; Pred. No. 4.3e+03; es 35; Conservative 0; Mismatches 11; Indels (

Query Match

Matches

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining the presence of a CYPPDE target sequence in a DNA sample containing CYP2D6 nucleic acid, for detecting mutations or polymorphisms, comprises detecting the scattered light from a particle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genemic nucleis acid, especially in a pharmacogenetically relevant geneor genes in a DNA sample, and to detect and measure one or more target sequences in a sample. The method may also be used to detect specific
                                                                                                                            Human; CYP2D6, primer, single nucleotide polymorphism detection, SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mutations to identify the phenotypic classification of an individual.
ABKroif2-ABKrollo represent CYP2D6 target sequence-specific primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          absence of particular single nucleofide polymorphisms or alleles in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthesis, selection, amplification, circular eligenucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 28.2; DB 24; Length 50;
80.5%; Prod No. 5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rolling circle synthesis; diagnosis; therapeutic agent; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peterson T, Yguerabide J;
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                                                                 CYP2D6 gene polymorphism detection primer #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2; Figure 6; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV12483 standard; DNA; 39 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bound to the target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-JUN 2001; JOHNO-USIRALZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 JUN 2000; 2000US-210988P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kohne DE, Korb L,
23-APR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENI-) GENICON SCI CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI, 2002-130745/17.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of the invention.
                                                                                                                                                                                                                                                                                                                                 WO200196604 A2
                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33;
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                                                                                                                                                                                                                                                            Syntheric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bee G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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3 qq

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The present sequence represents an oligonucleotide used in an example of the present invention. The present invention describes a method for synthesising a selected oligonucleotide (1) having well defined ends. The method comprises: (a) annealing a primer to a single-stranded (ss) circular template to yield a prime direcular template, where the template comprises: (i) at least one nucleotide sequence complementary to (1); and (ii) at least one nucleotide sequence complementary to (1); and (ii) at least one nucleotide perfective for produce a cleavege.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              site in the oligonucleotide multimer, (b) combining the primed circular template with at least two types of nucleotide triphosphates and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polymerase enzyme without the addition of auxiliary proteins to yield a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             so oligonucleotide multimer complementary to the circular oligonucleotide template, comprising multiple copies of (1), and (c) eleaving the oligonucleotide multimer at the cleavage site to produce (I) having well defined ends. The method is used for the large scale synthesis of DNA and RNA oligomers for use, e.g. as probes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                        Palling circle synthesis of aliga mucharide(s) - using primad circular template to produce aliganucleatide multimer for cleavage
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 28; DR 19; Length 39;
RK 1%; Fred No 4 96+63;
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4 ap.e3,
~has 5; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 39 BP; O A; O C; 3 G; 36 T; O other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnostic agents and/or therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                         Example 2; Column 45; 38pp; English.
                                                                                                                     951S-0393439.
                                                                                                                                   93US-0047860
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JUN-1999 (first entry)
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nes 31, Conservative
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                                                                                                                                                                     REPLACE OF THE POSTER
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                                                                                                                                                                                                                                        WPI, 1008-144279/13.
                                                                                                                                     15-APR-1993;
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                                                                                  23-FEB-1995;
              US5714320-A.
                                                  03-FEB-1998
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                                                                                                                                                                                                      Kool ET;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                   multimer, comprising multiple contiguous copies of a repeated oligonucleotides. The detectably labelled oligonucleotide multimers may useful for detecting a target molecule. Oligonucleotide multimers may be produced in sufficient quantity to be useful for diagnostic and medical applications. The multimers are useful for affinity labelling of proteins, and for signal amplification in highly sensitive affinity capture and sequence identification in publications. The method provides a faster, cheaper and simplex way for large-scale production of DNA and RNA oligomers and multimers. The incorporation of labels enables the
                                                                                                                                                                                                                                                                                                                                                                                             oligonucleotide multimers to be useful in diagnostics and medicine. The present sequence represents an oligonucleotide used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for measuring (MI) a target nucleic acid (I). The method comprises: (a) forming a hybrid in which (I) is combined to a solid phase; (b) hybridising at least one spacer primer (II) to (I); (c) extending the 3'-terminal of (II) in the presence of a labelled nucleotide; (d) hybridising the extended 3' terminal with an amplification primer; and (e) measuring the label
                                                                                                                                                                                                       The present invention describes a detectably labelled oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer for amplifying nucleic acid by making branches SEQ ID NO:3.
                                                                     New detectably labelled oligonucleotide multimer, comprising multiple contiguous copies of a repeated oligonucleotide - useful for detecting target molecules in diagnosis and medicinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 28; DB 20; Length 39; 86.1%; Pred. No. 4.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Measurement, hybrid, target nucleic acid, spacer primer, hybridisation, amplification, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Measurement of a nucleic acid with high sensitivity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3120 TITCTICCTICCTITITITITITITITITITITITI 3155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 39 BP; 0 A; 0 C; 3 G; 36 T; 0 other;
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                                                                                                                                                                    Example 2; Page 41; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 9; 14pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   the present invention.
                                   WPI; 1999-181062/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                              applications
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Kool ET;
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combined to the solid phase. The method is used for the measurement of nucleic acid contained in a trace amount in a sample with high sensitivity. The present sequence represents an oligonuclectide primer for amplifying a nucleic acid by making branches, which is used in an example from the present invention.
                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human reproductive system related antigen DNA SEQ ID NO: 10177.
                                                                                                                                                                               0;
                                                                                                                                            0.5%; Score 28; DB 22; Length 45; 77.3%; Pred. No. 5.3e+03; tive 0; Mismatches 10; Indels
                                                                                                                                                                                                                  Sequence 45 BP; 40 A; 4 C; 1 G; 0 U; 0 other;
                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                            AAL07489 standard; DNA; 47 BP
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2000US-0215135.
2000US-0216647.
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2000US-0214886.
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2000US-0225447.
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                                                                                                                                                              Local Similarity 77.3
nes 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer; gene therapy; ds.
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16-MAR-2000;
17-MAR-2000;
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11-JUL-2000)
14-JUL-2000)
26-JUL-2000)
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22-AUG-2000)
22-AUG-2000)
23-AUG-2000)
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                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                     RESULT 30
AAL07489/c
                                                                                                                                                                                 Matches
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2000US-0227009

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2000US 0229344.
2000US 0229344.
2000US-0229509
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2000/90 0231413
2000/15 0232680
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2000US-0240960
2000US-0241221.
2000US-0241795.
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2000118-0231243
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2000118-0231413
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2000US 023434
2000US 023494
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2000US 0235834
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2000US-0236367.
2000US-0236368.
2000US-0237769
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206603-6237637
20603-6237638
206018-6237633
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2000US-0244817.
2000US-0246474.
2000US-0246475
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2000US-0246477.
2000US-0246478.
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200018 - 0246527
200018 - 0246527
200018 - 0246528
200018-0229297
200018-0229297
200018-0229343
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2000/18 0233064
2000/18 0233065
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Savetts 0239935
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2000US-0230437
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200078-0246611
                                                                                                                                                                                               שנישטרבה פעותהמת
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0000115-0236370
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2000005-0249207
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2000US - 0249210
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The present invention provides the protein and solding sequences of a number of human reproductive system related antigens. Those can be used in the prevention and treatment of reproductive system listabers, in clouding cancer. The present sequence is a genemic sequence encoding a protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isolated nucleic acid molecule encoding a reproductive system antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      is used in preventing, treating or ameliorating a medical condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, SEQ ID No 10177, 1297pp • Sequence Listing, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POB, celection, primers, optibbin, breeding, cattle, parentage, genetic mapping, traits, amplification, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 5%, Scorn 28, PP 23, Length 47, 77,3%, Fred, No. 5.4e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     io, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3115 ACTICTUTCTICCTICTITITITITITITITITITITIAG 3158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 47 BF; 36 A, 4 C, 2 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Microsatellite sequence from clone AGLA222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WS Hedrid
17 NOV 2000 2000 IS -0340211
17 NOV 2000 2000 IS -0349212
17 NOV 2000 2000 IS -0349213
17 NOV 2000 2000 IS -0349213
17 NOV 2000 2000 IS -0349214
17 NOV 2000 2000 IS -0349216
17 NOV 2000 2000 IS -0349218
17 NOV 2000 2000 IS -034929
18 DEC 2000 2000 IS -034929
18 DEC 2000 2000 IS -034929
18 DEC 2000 2000 IS -034949
18 DEC 2000 2000 IS -03499
18 DEC 2000 2000 IS -034999
18 DEC 2000 2000 IS -034999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ33543 standard, DNA, 21 PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA+) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-FEB-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post Local Similarity 77.3
Matches 34, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Posen CA, Barash SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-465570/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WC9213102-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prery Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PESULT 31
AAQ33543/c
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WPI; 1992-096567/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Han JH,
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 33
                                                                                                                                                                                                                                                                                                                                                                                                            AAA39649
à
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                                                                                                                                                                                                                                                                              The sequence is that of a bovine microsatellite sequence obtd. by screening a library of bovine Mbol DNA fragments of between 250 and 500 bp with an (ACI)s and a (TC)15 oligonuclectide probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and Mbol sites, the frequency of (TC)n >9 microsatellites in the bovine genome is estimated at >100, 000. The sequence information for ca. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                       amplification of the corresp, microsatellite (using the program objects). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important
                                                                                                                                                                                                     Polymorphic bovine DNA markers - used in genetic identification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 27.8; DB 13; Length 31; 33.5%; Pred. No. 4.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIV; thiolation; reverse transcriptase; primer; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     traits esp. in cattle, to allow selective breeding.
See also AAQ33501-34437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 31 BP; 16 A; 0 C; 15 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide specific for HIV proviral DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ho YK, Aradi J, Schinazi RF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1066 TCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31 rereferencierererererererer 1
                                                                                                                                                                                                                    gene mapping, and selective breeding
                                                                                                                                                                                                                                                  Table 7; Page 145, 517pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ25031 standard; DNA; 40 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 93.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91WO-US05919
                                            92WO-US00340
                                                                           91US-0642342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29; Conservative
                                                                                                                                          Georges M, Massey JM;
                                                                                                                                                                      NPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     homooligomer; ss.
                                                                                                         (GENM-) GENMARK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-AUG-1990;
                                            15-JAN-1992;
                                                                           15-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-JUL-1992
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              06-AUG-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bardos IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ25031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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comprising a sequence fully homologous to pestivitus homology box IV, and then translating it so that the translation of the coding region is enhanced. The method is useful for enhancing or controlling the translation of HCV nucleic acid, which allows stronger immune responses, where blocking or decreasing translation of viral nucleic acid may a primer which is used in the construction. This sequence represents in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel method for enhancing translation of coding region which involves making an RNA molecule, comprising the coding region operably linked to a 5' untranslated region (UTR)
                                                                                                                                                                                                                           region (d(T)12) to promote the binding of the remaining portion of
the 5-thiolated oligonucleotide (MdU 28) to a homopurine site of
the viral genome via triple-helix formations. The oligo is used to
in the treatment of HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enhancing translation of coding region of hepatitis C virus involves making RNA molecule comprising the coding region and 5' untranslated region comprising a sequence fully homologous to pestivirus homology
                                                                                                                                                                                       The oligomer comprises a non-thiolated (binding) homooligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Control element; translation enhancer; pestivirus homology box IV; immune response; viral infection; primer; ss.
Compsn. contg. 5-thiolated (oligo-poly-)-nucleotide(s) - for treating HIV infection, AIDS and for preventing HIV-1 infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%, Score 27.8, DB 13, Length Best Local Similarity 20.5%, Pred. No. 5.5e+03, Matches 8; Conservative 24; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Selby MJ, Houghton M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3117 TICTICTICCTICCTITITITITITITITITITITITI 3155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 Triririririrumumumumumumumumumumumumum 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer used in construction of hybrid CAT RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 40 BP; 0 A; 0 C; 0 G; 12 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                               See also AAQ22624-27 and AAQ25017-Q25032.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Column 19-20; 16pp; English.
                                                                                                               Disclosure; Page 11; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA39649 standard; DNA; 40 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suh BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-0439996.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-SEP-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-338599/29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-SEP-1993;
28-SEF-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6057093-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  detection of a break point region in rearranged nucleic acids. By using a femtomolar amount of the probes, a large number of different probesets can be used to simultaneously detect and quantify a corresponding large number of sets sequences with high specificity. The present DNA sequence is bictin-073 labelled flucrescent cligarucicetide which is used for the hybridisation selection reaction of human mPNA samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human mRNA hybridisation selection reaction biotin-dT3 oligonucleotide
                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; multiplex ligation-dependent amplification, amplicon, single nuclectide polymorphism; hybridisation selection reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           An improved multiplex ligation-dependent amplification method for detecting specific single stranded target nucleic acids in samples
                                                                                                                                                0;
                                                                        Length 40,
                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Biotin-labelled Thymidine"
                                                                    0.5%; Score 27.8; DB 21;
82 1%; Pred No 5 5+03;
                                                                                                                                                                                                                     Sequence 40 PP; O A; O C; O G; 40 T; O other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 43 BP; 0 A; 0 C; 0 G; 43 T; 0 other;
                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 8; Page 137; 158pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod bases OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAD17216 standard; DNA; 43 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-PER-2001; 2001WO-FP01739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-FEB-2000; Zemmah midesek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20.NCV 2001 (first ontry)
                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHOZ) SCHOUTEN I P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-550053/61.
                                                                                                   Loral Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200161033 A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schouten JP;
                                                                                                                                         32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAD17216;
                                                                Query Match
                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 34
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0.5%; Score 27.8; DB 22; Length 43;

Query Match

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                                                                                                                                                                                                                                                                                 BGEL3 is protein, human adult brain cDM library, nutritional activity,
cytokine activity, cell proliferation/differentiation activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This nucleotide sequence encodes the 3' portion of the BG513_19 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        which was isolated from a human adult brain obtain library. The products of the polymucleotides of the invention can be used in research, detection and therapy, as they may have nutritional activity, cytokine and cell proliferation/differentiation activity. A search against the Genbank database demonstrated that this sequence has no homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Poly nucleotide(s) and proteins obtained from human PBMC, dendritic
cell, adult brain, foceal brain and adult testes cDNA libraries -
used in research, detertion and therapy of, e g cytobine and cell
proliferation or differentiation.
                                                                                                                                                                                                                                                     Mucleotide sequence of the 3' portion of the BG513_19 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 27.8; DB 19; Length 44; 82.1%; Pred. No. 5.8e+03; 20. Mismatches 7; Indels C
              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCCOOK JM
                                            3155
82.1%; Pred. No. 5.8e+03;
tive 0; Mismatches 7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Evans C, Jacobs K, LaVallie EP, Racie LA, Spaulding V, Treacy M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 44 RP; 44 A; 0 C; 0 G; 0 11; 0 other;
                                            Claim 19; Page 51; 78pp; English.
                                                                                                                                                         AAV09273 standard; cDNA; 44 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                           97WG-US10501.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-0664596.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ilarity 82.1%;
Conservative
                                                                                                                                                                                                                      07-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ66922 standard, DNA; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GEMY ) GENETICS INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JAN-1995 (first entry)
              32; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         with known sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WFI, 1998-063142/06.
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
es 32; Conserv
                                                                                                                                                                                                                                                                                                                    homology; ss.
                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                           F-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                               WO9748801-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                             24-DEC-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Merberg D,
                                                                                                                                                                                       AAV09273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bowman M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ66922;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ66922/c
                                                                                                                                        AAV09273/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                          RESULT 35
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This sequence represents a target sequence which was used to demonstrate the binding ability of the hairpin forming probes of the invention. The probes comprise a segment complementary to the target nucleotide and are capable of forming at least 1 imperfect hairpin. The probes contain a least one acceptor label moiety and at least one donor moiety label which are covalently attached to the nucleotide sequence so that when the hairpins are formed the moieties are in close proximity to allow resonance energy transfer between them. This causes a reduction in the fluoresence of the two fluorophores. The target sequence contains at least 22 nucleotides to ensure specificity and avidity of the probe-target hybridisation. The hairpins formed are imperfect hairpins and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the intentional base pair mismatches are introduced into the competitive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           between the fluorophores, resulting in a change in fluorescent emission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transport; membrane, cytostatic; virucide; vasotropic; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 arms such that the specificity sequence will favour binding to the target sequence. Therefore when the probe interacts with the target sequence the competitive arm is displaced, increasing the distance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid probe for use in DNA or RNA hybridisation assays - comprises a nucleotide sequence which is capable of forming one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                             Target sequence, binding ability, hairpin forming, probes, imperfect hairpin, acceptor label moiety; donor moiety label; fluoresence, fluorophores; specificity; base pair mismatches;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 27.8; DB 15; Length 50; Pred. No. 6.3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Target sequence for probe binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conjugate forming oligonucleotide ON6 SEQ ID 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 50 BP; 50 A; 0 C; 0 G; 0 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
Poly-dA 50mer probe target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MAIN-) MAINE MEDICAL CENT RES INST.
                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 2; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF60897 standard; DNA; 50 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93EP-0310007
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32; Conservative
                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                          competitive arms; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1994-185245/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  more hairpins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-DEC-1993;
                                                                                                                                                                                                                                                                                                                                          misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bagwell BC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP601889-A.
                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF60897;
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AAF60897/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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This invention describes a novel conjugate (I) which consists of (A) a molecule to be transported and (B) at least one aryl residue of formula (C. Ar. (X-(Y); R. I), R. II.) Ar. = group containing at least one aromatic ring; X = 0 or N (sic); Y = 0. S or NH-R. 2 (sic); R. I = optionally containing double and/or triple bonds); R. 2 = optionally substituted 1-18C alkyl (optionally containing double and/or triple bonds); n = integer of 1 or more. (A) is bonded to chouble and/or triple bonds); n = integer of 1 or more. (B) directly or via a chemical group, provided that the chemical group is contained and or transported and (B) at least one aryl residue (not more than CH 2-S if the bond is via a phosphodiester linkage of (A). The creaticed to (III), by preparing (A) at least one aryl residue (not a molecule to be transported and (B) at least one aryl residue (not creaticided to (III)), by preparing (A) containing a reactive function at the position at which (B) is to be bonded, preparing (B) and reacting (A) and (B); and (I) the use of aryl groups (II) (optionally bonded (C) and (B); and (II) the use of aryl groups (II) (optionally bonded (C) are activities of the invention have cytostatic, virucide, vasotropic, dermatological, antipsoriatic and antiaschamatic activity and can be used (A) across biological membranes or into eukaryotic or prokaryotic cells, specifically bacterial, yeast or mammalian cells, including human cells, particularly tumor cells). Medicaments, diagnostic agents and test kits ontaining (I) are also claimed. Typically (I) are antisense containing (I) are also claimed. Typically are antisense or archive or archiver or prokaryotic or prokaryo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cell-cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ hybridization. Conjugation with (B) markedly improves the cellular uptake of (A), e.g. in tumor cells. (B) include fluorescein derivative residues, in which case the conjugates (I) are fluorescently labeled, allowing microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within the scope of (B)) have superior uptake to corresponding fluorescein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            is superior to that obtained using other conjugated groups related to
antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense; tumor therapy; drug; phosphodiester linkage; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New substituted aryl conjugates of parent molecules, especially oligonuclectides, having improved transmembrane and intracellular transport properties, useful as medicaments or diagnostic agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unger E, Gothe G, Schwerdel M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 50 BP; 50 A; 0 C; 0 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 9; 28pp; German.
                                                                                                                                                                                                                                                                                                                                                                                           (AVET ) AVENTIS PHARMA DEUT GMBH.
                                                                                                                                                                                                                                                                    99DE-1035302.
                                                                                                                                                                                                                                                                                                                                99DE-1035302.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Uhlmann E, Greiner B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-203679/21.
                                                                                                                                                   DE19935302-A1.
                                                                                                                                                                                                                                                                    28-JUL-1999;
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Gaps

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RESULT 38 AAS58336

3117 TICITICITICCTICCITITIT

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DB 22; Length 50; Indels

Score 27.8; DB 22 Pred. No. 6.3e+03; 0; Mismatches 7

0.0 %

82.1%;

Conservative

Local Similarity es 32; Conserv

Matches

Query Match

; 0

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Human; colon tumour protein; colon cancer; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                              profession for at least an immunogenic portion of human colon tumour profess of the invention are useful in pharmaceutical compositions and vaccines for the prevention and treatment of cancers such as colon cancer. They are also useful for the diagnosis and monitoring of such cancers. Antibodies to the colon tumour proteins and antigen presenting cells that express polynucleotides encoding colon tumour proteins can be used to inhibit the development of cancers. The cells that react specifically with colon tumour proteins are useful for removing tumour cells from samples (e.g. block) and for cancer treatment. The polynucleotides sequences are also useful in gene therapy. AASS7325-AASS880 represent the CDNA sequences of the invention that encode for portions of human colon tumour proteins
                                                                                                                                                                                                                                                                                                                                                                                       Th present invention relates to the isolation of novel cDNA sequences
                                                                                                                                                                                                                                                                                                                              New colon tumour proteins and related nucleic acid, useful for treatment, prevention, diagnosis and monitoring of cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    c.`
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 27.8; DB 23; Length 50; R2.1%; Pred No 6 30+03;
                                                                   CDNA #1012 encoding portion of a human colon tumour protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polymorphism detection related oligonuclectide SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Intels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polymorphism; detection; mass spectroscopy; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ^; Mismatthes
                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 216; 299pp; English
AASS8336 standard, cDNA, 50 BF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN89414 standard; DNA; 50 BP.
                                                                                                                                                                                                          24-MAR-ZÖDÖ, 2000US-191597P.
04-MAY 2000, 2000US-202024P
05-MAY 2000, 2009US-202189P
                                                                                                                                                                                                                                                                               Meagher MJ, Xu J, King GE;
                                                                                                                                                                                    22 MAR-2001; 2001WO US09246
                                             (first entry)
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                                                                                                                                                                                                                                                         (COPI-) COPIXA COPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                 Homo sapiens
                                            13-FEB-2002
                                                                                                                                                             04-OCT-2001.
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                      AAS58336
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The present invention describes a method for detecting polymorphisms in DNA by (a) preparing a pNA sample from patients containing the PNA region in which the target polymorphism is located, (b) hybridising to an appropriate oligonuclectide fragment, immobilised on a support; and (c) detecting the hybridised target DNA by mass spectroscopy. The method can be used for the investigation and diagnosis of gene-related diseases. The method allows polymorphisms to be detected rapidly and effectively in a large number of specimens. The present sequence represents an oligonucleotide which is used in an example from the present invention.
                                                                                                                                                                                                                                                                                Tamiya G, Nakajima K, Kimura N, Nagashima P, Morikawa M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, single nucleotide polymorphism, SNP, polymorphism, cytostatic, immuosappressive, antificlammatory, neuroprotective, antimitrabial, autoimmune disease, inflammation, cancor, norvous system disease, inflammation, cancor, norvous system disease, infection, polymorphic protein, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         isolated human nucleic acids comprising one or more single much-utide polymorphisms, useful for treating a subject suffering from a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Page 29; 34pp; Japanese.
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Best Local Similarity 82 19
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27 JUN 2002
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